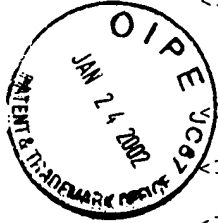


# Sequence Listing

<110> Southern Illinois University  
Lightfoot, David  
Meksem, Khalid

<120> ISOLATED POLYNUCLEOTIDES AND POLYPEPTIDES RELATING TO LOCI  
UNDERLYING RESISTANCE TO SOYBEAN CYST NEMATODE AND SOYBEAN SUDDEN  
DEATH SYNDROME AND METHODS EMPLOYING SAME



<130> 1268/4/2

<140> 09/772,134

<141> 2001-01-29

<150> 60/178,811

<151> 2000-01-28

<160> 122

<170> PatentIn version 3.0

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Pro Trp Lys Gly Leu Arg Gly Arg Ile Thr Asp Lys Ile Gly Gln Leu
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690 695 700

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Val Tyr Glu Trp Thr Arg Phe Ala Ser Val Gly Cys Leu Ser Cys Gln  
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Arg Gly Val Asp Lys Xaa Gly Phe Xaa Cys Arg Leu Asp Glu Arg Cys  
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Ile His Ser Trp Arg Arg Val Ala Lys His Val Glu Ala Arg Phe Ala  
770 775 780

Leu Cys Xaa Ser Phe Ser Ile Ser Thr Thr Arg Ser Ser Ser Ser Ser  
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558

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<213> soybean  
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<221> partial\_cds  
<222> (1)..(781)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 19

ggaggagtgg gaaagacagt ggctatggag cttgttccgg aggttgggtt ggaatcaagt 60  
gtgctcaggg acaggttatt gtgatccagc ttccttgga ggggtttgag gggtcgaatc 120  
accgacaaaa ttggccaact tcaaggcctc aggaagctta gtcttcatga taaccaaat 180  
gggtgtcaat cccttcaact ttgggacttc ttccaacctt agaggggttc aagttattca 240  
acaataggct tacaggttcc atacctcttt ctttaggttt ctgccctttg cttcaagtct 300

cttgacctca gcaacaactt gctcacagga gcaatccctt atagtcttgc taattccact 360  
aagctttatt ggcttaactt gagtttcaac tnccttctctg gncctttacc agctagccta 420  
actcactcat tttctctcac ttttctttct cttcaaaaaa acaaactttc tgggtccttt 480  
ctactcttgg ggggggaatt ccagaatggn ttcttttaggg ttnaaaattg atcctagaca 540  
tactttttac tggggacgtc ctgcttcttt ggnagcttaa agagctcaat gagattncct 600  
tagcataata agttaggggg gctttnccaa agnaatagga ncctttntag ggttaaaaac 660  
ctggcatttt taaaatgcct tgaangggac ttgnccgctn cccctntaat tatccncctt 720  
acnccgntgg anggagagaa aancccttg caaanaaaac cctcaaaggt tagggngatc 780  
g 781

<210> 20  
<211> 861  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(861)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 20

gaatgggagg agtgggaaag acagtggcta tggagcttgt tccggagggtt gggttggaat 60  
caagtgtgct caggacagg ttattgtgat ccagcttctt tggaagggtt tgagggtcg 120  
aatcaccgac aaaattggcc aacttcaagg cctcaggaag cttagtcttc atgataacca 180  
aattggtggt tcaatccctt caactttggg acttcttccc aaccttagag gggttcagtt 240  
attcaacaat aggcttacag gttccatacc tctttcttta ggtttctgcc ctttgcttca 300  
gtctcttgac ctacgaaca acttgctcac aggagcaatc ccttatagtc ttgctaattc 360  
cactaagctt tattggctta acttgagttt caactccttc tctggtcctt taccagctag 420  
cctaactcac tcattttctc tcaactttct ttctcttcaa aataacaatc tttctggctc 480  
ccttcctaac tcttgggggtg ggaattccaa gaatggcttc tttaggttc aaaatttgat 540  
cctagatcat aactttttca ctgggtgacgt tcttgcttct ttgggtagct taagagagct 600  
caatgagatt tcccttagtc ataataaagt ttaatggagc tataccaaat gaaataggaa 660  
ccctttctan gcttaaacac ttgacatttn taataatgnc ttgaatggga acttgccctgc 720  
taccctctnt aattatcctn cttacactgn tgaatgcaa aaacaacctc ttgcaataaa 780  
tcccttaaan ttangnnaat gggaaanttn tttntgattt gagtnaaacc aattaatggc 840  
atattnttta acatttaaan t 861

<210> 21  
<211> 761  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(761)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 21  
gaatgggagg agtgggaaag acatgggggtt gaagggctgt acccacatag ttgaatatatt 60  
cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg 120  
ctattgtagg aaacattgaa gggattttaga ctgcgctgac tgtcaaagga gactggaatt 180  
tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg 240  
cttgaaggaa tatgtccact aaattgggtt ctactcaaaa tcagaacaga aagattacgc 300  
aatctaccta aactttgagg gatttgattg tcaaggaggt tgttctctgc attcagcagt 360  
gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa 420  
atgtcaagtg tcttaagcct anaaagggtt cctatttcat ttggtatagc tccctaaact 480  
tattatgact aagggaaatc tnattgagct ctnttaactc ccaaagaaca ggacgtncca 540  
gtgaaaaagt atnatctagg atcaaatttg aacctaaaaa gcattttgga tcccccaaa 600  
gtaggaagga gcanaagatg tntttnaaaa anaaatanaa aatatagtag tactgtaagc 660  
naaaagggtga ctaatagcat aantatgata caaattagga tttcttanaa ttttttnnaa 720  
aatnnnangn aaccaaaaaa gngacntncn tttnaanacc c 761

<210> 22  
<211> 856  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(856)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 22  
aatgggagga gtgggaaaga cagtggctat ggagcttggt ccggagggttg ggttggaatc 60  
aagtgtgctc agggacaggt tattgtgatc cagcttcctt ggaaggggtt gaggggtcga 120  
atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa 180  
attggtgggt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta 240  
ttcaacaata ggcttacagg ttccatacct tttcttttag gtttctgcct ttgcttcaag 300  
tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc 360  
actaagcttt attggcttaa cttgagtttc aactccttct ctggctcctt accagctagc 420  
ctaactcact cattttctct cacttttctt tctcttcaaa anaacaatct ttctggctcc 480

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cttcctaact cttggggtgg gaattccaag aatggcttct ttaggcttca aaaattgatc 540
ctagaacata acttttttac tggtgacgtt cctgcttttt ttggtaggct taaaganaag 600
ccaatgagaa tttccttagt catnataaag ttaaggggag cttttnccaa atgaaaaaag 660
gaaccctttt taggcttaaa nanacttgac aatttntaat aatgcccttg aatngggaac 720
ttgcctgcta ccccttttaa tttatcctac ttaccctgnt ngaaggcaaa naacaacccc 780
tttgcaataa aaaccnaaa gttaagggga angnggnact ttntntctnn tttngggnaa 840
accanttann ggcncct 856

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<210> 23
<211> 826
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(826)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 23
gaatgggagg agtgggaaag acatgggggt gaagggctgt acccacatag ttgaatat 60
cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg 120
ctattgtagg aaacattgaa gggatttaga ctgcgctgac tgtcaaagga gactggaatt 180
tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg 240
cttgaaggaa tatgtccact aaattgggtt ctactcaaaa tcagaacaga aagattacgc 300
aatctaccta aactttgagg gatttgattg tcaaggaggt tgttctctgc attcagcagt 360
gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa 420
atgtcaagtg tcttaagcct agaaagggtt cctatttcat ttggtatagc ttcactaaac 480
ttattatgac taanggaat ctcatgagc tctcttaagc tacccaaaga agcaggaacc 540
gtcaccagtg aaaaaagtta tgatctagga tcaaattttg aacctaaaaa accattcttg 600
gaattccacc ccaagaatta ggaaggagc canaaagatt gttattttga aaaaaaaga 660
aaagtgagaa aaaatgagtg agttaggctt actggtaaaa ggaccaaaaa aaggantttg 720
aaactnaaan ttaanccaat aaaacttaat ggnaataaca aanactttta nggaattctc 780
ttttnaacaa attnttncct angncaaaaa anttaancaa aggnct 826

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<210> 24
<211> 571
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(571)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

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<400> 24
tgggactggc tgtgactgat ctctctggtc taatctcttc cagctgctgg agaacttgat 60
gaactttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt 120
ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat 180
ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag 240
acaccccagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat 300
cagttttagt gtttgctttc ttgagctttg agagctcagg tgcccgggat cccaatgctt 360
cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agacaaaaat 420
ctgcaatddd agcatttgna ttctcattaa acaacacaat gntggatgng anggtncat 480
ggatgaaggt cttctnggna agnaagnaaa acaaagcacc gggccaaggn ttgggctaata 540
ttcaaccttg gggggcaaac naanaaatgt t 571

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<210> 25
<211> 727
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(727)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 25
ttacaactag tggtatcgga gaatgaaaaa ttgaagaata ataagttcag ctataataaa 60
ctcgagggag gaaaaacaaa gaaattcatg ataaatagat ataacttatt aaatttaagg 120
gggtgatttg cacaccctga attatagaga ttcttatatc tttgagaaaa taattaaatt 180
gggaaaaaag agataatgac tgattgagat ttgcctcaga attgttcggt ttaatattgg 240
tacgaatcta atgggttttat cctgaaagat gctcacaagt attgagggac taataaattg 300
tttataaaact actactaaat gagatgagac tttaagggtg actgaagcaa tatcatttaa 360
aaaatgacta ctcgatattg tggtgagaaa atttatcttc aatgaaaaga aaatatatac 420
atataagata aagtaattaa cataaccgaa aggaaataaa atgcaacatt ataaaaacta 480
caactatata aatgatatat acaactccta gcacatgcat tggattgtga attaattaaa 540
atgttgatg gatggtaaaa attcaaaact aaacccccca caatttaagt gacacagaat 600
ataattagcg gtggctcttt tacagaaacg acgagaacaa aggtgtcaaa ggaaaggaga 660
tggtatgcat tggtatgagc tcatncaatt ccaacctgtt gtggacccaa gccgaagtcc 720
ttgacnn 727

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<210> 26
<211> 560
<212> DNA

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<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(560)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 26  
attacgcnag ctctatacga ctactatag ggagacaagc ttgcatgcct gcaggctcgac 60  
  
tctagaggat ccccggttac cgagctcgaa ttcccaatgc cagagcttcc ctatcgtggg 120  
  
ccccacctat gaagaatata cccacgttga aatacatggt gttgttggtg gacgcgcccc 180  
  
gccgagagtg ccggtccacg agtatcccca acgtgcatgg cgcattgcgt tgaacctag 240  
  
tattcatctt cctgatggag gcagccacgt gtccgacaag gtcaatgttg ccgttttcgt 300  
  
gaaaagggat gataatgaaa ggcaccatat tgtcttgggc gaggttgaaa atggcgctgt 360  
  
gcatgctctt gtaagggtgc acgttgatgt aggaagaac cttgactggc ccacttgagt 420  
  
tgttgaggta gttttcgaag gcttgcatga tgtggttggt gttggggtaa ttcacagaca 480  
  
agaattttct gngaccgtg tctatgtttt atgggaagga gaatgggtgc cttttcccca 540  
  
cnagctngat nagnggact 560

<210> 27  
<211> 630  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(630)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 27  
actgcatgca tgcaagcaaa tttaacttta cacaacacac caccagagtg taagctgttt 60  
  
cataaaaaat gattgtttcg ggctttcggg tcacaaggct tgtttagtat tcggtaagaa 120  
  
agaaagaaat aggtgataaa taaagtggat agaaacataa aagaaaggaa taaagtaatg 180  
  
aaaataaggg agaagtagaa taatggaaat agataagaaa tagaatggat tcgatagtat 240  
  
atctagttta agagaaataa gaaaaataa gaacaagaaa aaaaattgca ttttaattta 300  
  
ttatttgtagc tgtatcgatg attggcacga gattataagt ttttttttc gtgtttaccg 360  
  
ttgaaggatt atatatacata ccatttggtt gtcaaccaac acggaacttt aagtctcttg 420  
  
atgttcaaaa gcacttaaaa ctaaggaatt ttacatacata ttagtcgtct gtagactgat 480  
  
acaggatttt aagcctatat atctagcatt gatccggttg gcaatcaata tcacattaat 540  
  
gatcggtaaa ccattcatat aaccctttg attggtcaag aaatggcttt atgaatccca 600  
  
ggattgagcc cagaancagg ngatactagn 630

<210> 28  
<211> 756

<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(756)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 28  
attggcttaa cttgagtttc aactccttct ctggctcctt accagctagc ctaactcact 60  
cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttntaact 120  
gtgggggggg gaatancaag gngggcttta ggctgcaaaa ttgatccta gatcataact 180  
ttttcactgg tgacgttctt gcttctttgg gttagcttaag agagctcaat gagatttccc 240  
ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta 300  
agacacttga catttctaata atgccttga atgggaactt gcctgctacc ctctctaatt 360  
tattctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa 420  
gtttaggtag attgcgtact ctttctgtt ccgattttga gtagaaacca atttagtgga 480  
catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata 540  
atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa 600  
tggttnctac aataggcctc tcagggtctg gcccccttt gnttggccaa ggaaanttaa 660  
cttaagctta tttgngggg aaanattcaa ctatgggggg acncggccct ttaaacccca 720  
gggnttttcc caggttcctt ccaagggngc anttgt 756

<210> 29  
<211> 566  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(566)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 29  
gacccttggt ctatagaacc gaattcgagc tcggtaccg gggatcctct agagtcgacc 60  
tgcaggcatg caagcttatt attactacta ctacttatct tcaactccacc aactgtgtc 120  
actaaaaccg gaaccatccc catacaaaat tctactgaag acaacatata cccaatatt 180  
cccaatgcat cagcgttctc catgaaagtt gtcatttctt ttccattcaa agatccatca 240  
ttgtggcgcc ttcccacat cacaagatca tagtttcctt ccaaactatg cactgcttcc 300  
aacacctcca ccccatcgtc caccgtaac tcgtaccaac aaacgttacc aatgccatat 360  
ttcatgctct tgaactcgtc aattaacccc tcgtccaaca tggatatctt ctcttctct 420  
tcacgctctt ctcttgcaaa ataattttac aaccacacgg tttcttggtc acgataacaa 480  
acctaaacaa gctaccctcg tatctgcacg ctccgcattc gaattcccaa tgccagagct 540

tccctatcgg gggncacc tatgaa

566

<210> 30  
<211> 673  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(673)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 30  
gggactggct gtgactgatc tctctggctc aatctcttcc agctgctgga gaacttgatg 60  
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120  
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180  
tgtccactcc tctttgacaa ctgaggcaac ccactgagga aaatctagtc cattcataga 240  
caccacaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatata 300  
agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaagtc 360  
ttccagctgt agcttatcac cggtgggaat taagcagcaa gttggacatt caaccggag 420  
naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc 480  
aaccaccaat tggnttggga atgggtggaag gggttcccca atggtaattg gaagggtttc 540  
ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg 600  
nttttggggg ccttattttt tncnaatncc ctttggnngg ggncccaaat tcnaaantgg 660  
aaattggntt tnn 673

<210> 31  
<211> 736  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(736)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 31  
gttgnntagn tgcactatag aatnccaatt caatttaaac atttttaatt ttttgtcttt 60  
gtattctatt ttttcataaa ttctaattct gctaataatt tcaattcata ttaagatcgg 120  
taaataaaaa atctagaaaa aaaaacaaaa aaagtatttt tttttcattg attttatatt 180  
caattgattt gtcactaaca aactgattcc tcttaaatct cacaaaagta catgtcgata 240  
taaataatgag attataaatt catgatatac attttcgatt ttacatata atgttttttt 300  
tatctttttt agttcctaata aagcattttt aaatgtctta tgttcctact ttgcatatca 360  
gggaccatt aatgggacga ggtcactgag agcatgaaca acgtgtcttt cgtctcccga 420  
acaacgtgcc atcttgacgg ctcaccacct cggaatccct ggagtgggtca ccactgattt 480

tccggggaaa gcccgccggt gaaagtttga ttacaccggc aatgtgagcc ggtcgctgtg 540  
gcaaccctgg tnccgggaca aangcacacc aagttgnaan tttgggtccg agggngngcca 600  
naattgggggt tgcanggata ctaagcnntt ggnnacttnc ctggnnaacc caccctaat 660  
nccatntttc aatggggnac cnaatttctt acaattggnt gcaananggg nttttngggg 720  
aaccttttna ccccca 736

<210> 32  
<211> 566  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(566)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 32  
gaccnnagac gctactatag ggagacaagc tattcgaagg ggaactgaga acgatccaaa 60  
gcactccaag aaacagagag tttcacattg tttgttgtgt acataatgaa gcaaacgtgc 120  
gtggcatcac tgccttatta gaagagtgc acccagtgc agagagcccc atatgctct 180  
acgcagtcca cttatcgag ctctgtggga aaagtgcacc cattctcctt cccataaaac 240  
atagacacgg tcgcagaaaa ttcttgtctg tgaattacc caacaccaac cacatcatgc 300  
aagccttcga aaactactcc aacaactcaa gtgggccagt caaggttctt ccctacatca 360  
acgtggcacc ttacaagagc atgcacgacg ccattttcaa cctcgcccaa gacaatatgg 420  
tgcctttcat tatcatccct tttcacgaaa acggcaacat tgacctgtc ggacacgtgg 480  
ctgcctccat caggaagatg aatactaggt ttcaagcgca tgcgccatgc cgttggggat 540  
actcgnggcc ggnactctng gtgggn 566

<210> 33  
<211> 614  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(614)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 33  
acaacaagca acgaacagct tttaacctta aactaggcaa atgccaatat taaacaacaa 60  
ataattaaaa ttgtaaggct ggtcgagtat aaattaaaca aaaggccctc tattcaaacc 120  
ttcatatatc atacctgntt ttaattaacg cgactactt tttcatataa aaaaaagatc 180  
attagaggat taatttaaag cgntttagtt tttaattacc aaagagtata attattatta 240  
ggcgctttgg ccacaaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaaggcaa 300

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attggactaa tgcaaaagtg gcacaatctt tgncttgaac tctttaatta gcaacaaatn 360
atactcttct gcacaaatca caagaatacc ttacatgaaa agaatggnaa tntgacgggt 420
tacattaaat tatatgcagg tttctgcagg gaatcaattn tcaagaattn aagggggggt 480
gggaattttc aatagctagc ttgactagca aagggaaaga ataaaggnaa aangcttctt 540
ggctnggcct tttggganng gnatcctttt ngctaaaccg gaaanggnta tangaatggg 600
aaaggagana atcg 614

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<210> 34
<211> 602
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(602)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 34
aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta 60
gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga 120
gactgaagca aagggcagaa acctaaagaa agaggatgg aacctgtaag cctattgttg 180
aataactgaa cccctctaag gttggaaga agtcccaaag ttgaagggat tgaaccacca 240
atttggttat catgaagact aagcttcctg aggccttgaa gttggccaat tttggcggtg 300
attogacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac 360
ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccga 420
gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga 480
taggaggggtg cttcttcctt ttactggnc tacctcttcg ggaataagcc acctaagag 540
aaagaaagan ctgggatagc taactctaca tagnctcaag gcnagagata attagggaaa 600
ng 602

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<210> 35
<211> 644
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(644)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 35
ggaattttga agagaagtaa agtgagagaa aatgantgan nnaggctagc tggtaaagga 60
ccagagaagg atttgaaact caagttaagc caataaagct tagtggaatt agcaagacta 120
taagggattg ctctgtgag caagttgttg ctgaggtcaa gagactgaag caaagggcag 180
aaacctaaag aaagaggtat ggaacctgta agcctattgt tgaataactg aacctctta 240

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aggttgggaa gaagtcccaa agttgaaggg attgaaccac caatttggtt atcatgaaga 300
ctaagcttcc tgaggccttg aagttggcca attttggcgg tgattcgacc cctcaaacc 360
ttccaaggaa gctggatcac aataacctgt ccttgagcac acttgattcc aaccaacct 420
ccggaacaag ctccatagcc actggcattc cagctccgc aagaaccctt ctggatcagc 480
caactcttgc ttgaaagctt atcacatgta cctctctaca gataggaggg tgcttcttcc 540
ctttcactgg nctacctctt cgggaataag ccacctaag agaaagaaag anctgggata 600
gctaactcta catagnctca aggcnaagaga taattagga aang 644

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<210> 36
<211> 748
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(748)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 36
attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact 60
cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact 120
cttggggtgg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata 180
actttttcac tgggtgacgtt cctgcttctt tgggtagctt aagagagctc aatgagattt 240
cccttagtca taataagttt aatggagctg taccaaataa aataggaacc ctttctaggc 300
ttaagacact tgacatttct aataatgcct tgaatgggaa cttgcctgct accctctcta 360
atttatctc acttacctg ctgaatgcag agaacaacct ccttgacaat caaatccctc 420
aaagtttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg 480
gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcactgaa 540
taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc 600
aatgtttcct acaatagcct ctcanagtct gncctccctc tgcttgccaa gaaatttaac 660
tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn 720
ccaagcttca tacaaggagc atggccct 748

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```

<210> 37
<211> 563
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(563)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 37

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```

ctggctgtga ctgatctctc tgggtctaac tcttccagct gctggagaac ttgatgaact    60
tctggtcgtg ctgatggaga aggatcaaca cagtgcaaag cgagcttcaa cgtgttttagc    120
aactcgtcgc caactgtgga tgcattctctc atcaagtctg catcaaaaac ctcatattgtc    180
cactctctct tgcacaactga ggcaaccac tgaggcaaat ctagtccatt catagacacc    240
ccagggtgatt tctcgttag gagttctaac aagataaac caagactgta gatatcagtt    300
ttagtgtttg ctttcttgag ctttgagagc tcagggtgcc ggtatcccaa tgctccagct    360
gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaatctgc    420
aatttttagc tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat    480
gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggtta tttcatcctt    540
gtggccaatc aatgaatggt cat                                           563

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<210> 38
<211> 623
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(623)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 38
gattttgcac atctacttga gtaggcttca catgattccg tgtattactt ttatatttgg    60
atatatacca tgtggagtat agtatcactt tttgtcctac aaccacattt tatgagactt    120
gcattttatg tgacatgaac ataaaaaata atgaaaaaga aaatgtcaca tatatatgat    180
acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa    240
atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa cttaaatgaa    300
aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggtttta gcacaagggtg    360
aatccaaata aagaccccaa aagatagtac agaacccaac aatggtaaaa tctagaaata    420
tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga    480
tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc    540
attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt    600
acatgaaatc tgtcaccaag tac                                           623

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```

<210> 39
<211> 785
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(785)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

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```

<400> 39
caattaggaa ataaatatat tgaaaagaat tggtagtcag ttcaatgaaa gtgaggtcct      60
caaacaactt gatgcagcan ctgtatgata caaaatatat taataactac accagcagaa      120
aaatataggt caatctatat ttgggaacca aataatatat aatttgtatc tgatagactc      180
aagaaattat aactaatttg gaagaaatgg atacctagta ttattaaaac accaaaaacac      240
agggcagatt atagtagcta aagaggaaga agctaactag tcaaagtgtc acactattca      300
acactacaaa ggaccaatcc ccttttagag agcctgacct ttctcaccca agagctaccc      360
aagagaatac acaccctctc ctccatatcc cctcccatat aacacaatcc tcaccaacta      420
agcacctacc tgacaattcc ctccaaacca actctctgct catcaggggt gattctcttc      480
tctttccaag actttgggct tttgttttga ctaagccaaa tttctatctg ctggcctggt      540
ccaacagtat cttttacaga caagtttaca aaatattcgt atttggtaga atttattgat      600
attcctatta tgggtccccc tgtgtgcaaa catttagaaa ctaatattac aattaacagt      660
ttttggtgaa tgcagcaaaa ctaaatatat ttgatataga aatcaacaaa ctgaaaaatt      720
atatngcaag gncaattgga aaagaaaatt gataccctt ttgnggnaat aaatatantg      780
nntac                                                                    785

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<210> 40
<211> 640
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(640)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 40
tggaaggcgt ccttcaattc aatcacaaag tctaaatcaa agacgagggg gctgaaatca      60
tgggggacat tgacaacgta aggtaaccac taattaatta accactaata ttatccatt      120
aatatcccat taagagataa tacatataga gccaataaat aagcatctta acaagacaaa      180
taaattatcc attattcagc ttatgcccat ggtggtatta gaagtttagg aaaaaaaaaat      240
tcatcatttg gcaatttttg gctcattagc ttgaattggt tacaagggtg ggtatggact      300
tttttctttt cttttctcta aattcttctt tctatgatat acttttgggt aacttaaaact      360
caatttctta tagctcaata ttttggtttt agattggaaa tatctaaaag ncacttaaat      420
tttatattta caaaaaaaaaa aaaagcatcg ntctttttct ttttataaca aagggggatc      480
aaaatcactc tttttatgaa tccgcattat ccttnataat aattaacctc cactgggatt      540
taaagggnga ttaattaaat ccggaggcca tggaaggata tgggggaacc taatctaaaa      600
ntncatctc aaccctaang ggaaaataaa ggaatngggg                             640

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<210> 41  
<211> 808  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(808)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 41  
cttttgacac tatgaatagc aattcaaata ttaaataattt ttatTTTTTg tctttgtatt 60  
  
ctatTTTTtC ataaattcta atnttgctaa taatttcaat tcatattaag atcggtaaat 120  
  
agaaaatcta gaaaaaaaaa caaaaaaagt atTTTTTTTT cattgatttt attttcaatt 180  
  
gatttgtcac taacaaactg attcctctta aatctcacia aagtacatgt cgatataaat 240  
  
atgagattat aaattcatga tatctatttt cgatttttac atataatgtt ttttttatct 300  
  
tttttagttc ctaataagca tttttaaatg tcttatgttc ctactttgca tatcagggac 360  
  
ccattaatgg gacgagggtc actgcgagca tgaacaacgt gtctttcggt ctcccgaaca 420  
  
acgtgtccat cttgcaggct caccacctcg gaatccctgg agtggtcacc actgattttc 480  
  
cggggaagcc gccggtgaag tttgattaca ccggcaatgt gagccgttcg ctgtggcaac 540  
  
ctgttccccg gacaaaggca cacaagttga agtttgggtc cgagggtgca gattgtgttg 600  
  
caggatacta gcattgtcac tcctgagaac caccctatcc atcttcatgg gtcgattttc 660  
  
acattgttgc agagggtttc gggaaacttcg acccaaagaa agatccgcga aattcaacct 720  
  
tggtggatcc cctttgaaaa acacagtggc tggcctgtaa atggatgggc aagtattcga 780  
  
tttgggggct gataaccna gtaaatnt 808

<210> 42  
<211> 605  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(605)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 42  
ctcccggtc ccaagtaata ggccctcag agccaaaaca ttgggggggc taatttttcc 60  
  
tagaactctg acttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct 120  
  
ctttactgca acttgacttc catcctccaa aatagcctta taaacagntc cataggtgct 180  
  
ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattggtcc 240  
  
atcaaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac 300  
  
tgaggaggact cctttttctg cctcatagtg gccgctctac cctcggtggc ttggccgntc 360  
  
ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata 420

atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc 480  
ctatgatggg gatggttnga cacttcanga gggggggcaa tgactccctg ggaggagct 540  
tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc caciaangag 600  
cnngn 605

<210> 43  
<211> 275  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(275)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 43  
ctgaacggaa gtgactgcgt ttgtgtcggg tgtaagcagg gaggaggagc attataggtc 60  
tcggttttgc tctttactcc tttggcacga tggtgagaat gcttattgtg gtgattcggg 120  
gatttgtatt cgagtatggc ggttgtagtg gtgtgtcga aggcagcgtt ttgggcggat 180  
tggtacgcac gcgccgccat gtagtagcgg gaaggtggct ggtcnccggg gattaagacg 240  
tcggcgggttt gcccgggggc cactatgagg acttt 275

<210> 44  
<211> 632  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(632)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 44  
tgtatataat taaaatgagt ttaatattta tgtattaata gtataaaatt tatcatacat 60  
gatgaatggg gaaattttga attatgatta aataattata taaaaaaatt tacatgatga 120  
atgaataact ttttttttct caattaaaat tatgatcctt tgtcgatatg ttttactgtg 180  
tcgacctttt ttttcggggg agaggggacc agtaggagaa gtagtattta gtaaaagaag 240  
ggagagagaa gttgacttat cctttaatta gtttagagaa aattagacga gaaggaaaaa 300  
aaataggcga aagtcacttt ttctttctat ctctaccaag aatgttgatg aaaaagtggg 360  
gagcagaatt ttaaattttt attttcatat ttatccttct ccacattttt ggtttcttcc 420  
atttttttat aaaatgattt attttagggc ataggtaact tttcaatttt tttcattcta 480  
ttcgatcaaa taaatagaaa aataatttac ttttctttct tttaaccttt ttcattttc 540  
tctcataacg accacttatt aattacctct tttnccccac tttttgctat ncaaattctat 600  
ctttgaattt cttccttttc attttgggtct cn 632

<210> 45  
<211> 650  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(650)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 45  
ttcacagaca tagcaaaatt ctgaagtaag aagcaagttc acgtgtgatg gcgaaaccca 60  
ttatagaata tgtagactg aaaggtaaca aattaaaata tgttttattg cagaaaccat 120  
aaactaataa accttttggg tagatagaaa agtgataaat catacataat aataactgaa 180  
atactcagct tttaaatcaat ttaattcaat atatatctat ttttgaattt ttcaaagaga 240  
tgcttagcta gggaggaaac ctaatttagt ataaaaaaaa gaaacaaatt aaaaacataa 300  
attgccattg aatgcctctt aaaatattcc gatccattga tgtctacata ataatatata 360  
ttattgatat aataaccgat tgaataaaat ggatatacct attacgtaat agcagatttg 420  
tctacgcaa agagacagtc aaagggtgcta attagaaatt aatcgcccca taataaaatt 480  
ctaaaccttt gaaaagataa atcaattctc aaaaagattt attttactta tctcagtacc 540  
atgcaccatg gatcatctta ctgggtctggt tangaatttt caaagctacg ccacaaattg 600  
aaattgggct aaaaatcaaa catgcatggt gtcacaacta tattactagt 650

<210> 46  
<211> 628  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(628)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 46  
gaatgcacat ttataaaacg tgttgatcct ctccccgnng ggggaccaat taataaggta 60  
ccctgttgcc cctaggggac attggatggc catcagatgg tgcataata caccaaagtt 120  
tatacagcat tatagtgact ttcaacctcc tctctccgag gtccccatat attctctcta 180  
ttgaacttgt aaagactaat gaacttatga agactatcac tgaaaccac tatggaagcc 240  
ccagtagtaa aatggncatg catgctcacc aaaagtttat acagcattat agcgacatac 300  
gacctcactc ccaggncac atgctctatn gaacttctaa agctatctcn gaacctatt 360  
atagcttcat gagggtaaca tgcatttttag cgacttagaa aactacatat cattgagcgt 420  
gatcnttaag aaggcctcat tttagacaaa aagaacatga tggatttgcc tttatattcg 480  
gttactaacc ttgatagcta ttttggnacg agagaaaaat attgacatgc ccngngaadc 540  
aaaaggtaga taatnattaa agagataaag aactatcccc ttgctagggg naaaaaaaaa 600

ntatatccct atttaaataa aanccatc 628

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<210> 47
<211> 736
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(736)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 47
tggtgtatat aattaaatg agtttaatat ttatgtatta atagtataaa atttatcata 60
catgatgaat ggtgaaatgt tgaattatga ttaaataatt atataaaaaa atttacatga 120
tgaatgaata actttttttt tctcaattaa aattatgata ctttgtcgat atgttttact 180
gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag 240
aaggagagaga gaagttgact taccctttaa ttagttttaga gaaaattaga cgagaaggaa 300
aaaaaatagg cgaaagtcac tttttcttcc tatctctacc aagaatgttg atgaaaaagt 360
ggggagcaga attttaaatt tttattttca tatttatcct tctccacatt tttgttttct 420
tccatttttt tataaaatga tttatttttag ggcatagtta acttttcaat ttttttcatt 480
tctattcgat caaataaata gaaaaataat ttacttttct ttcttttaac cttttcatat 540
ttctctcata acgaacaact tattaattta cctcttttcc cccacttttg tctatccaaa 600
ttctatcttt gaattttctt ccttttcatt ttggttctca acccaaataa agaagaacga 660
gtttggataa atcataaagg ttatatacc tataantgga agaacattta aatgggtccaa 720
ngggccttaa aattct 736

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<210> 48
<211> 695
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(695)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 48
atgccagagc ttcccttata gtggccccac ctatgaagaa tacacccacg ttgaaataca 60
tggtgttggt gttggacgag cccagcccgga gaggccggt ccacgagtat cccaacgtg 120
catggcgcat gcgcttgaaa cctagtattc atcttctga tggaggcagc cacgtgtccg 180
acaaggtcaa tggtgccgtt ttcgtgaaaa gggatgataa tgaaaggcac catattgtct 240
tgggcgaggt tgaaaatggc gtcgtgcatg ctcttgtaag gtgccacgtt gatgtagggg 300
agaaccttga ctggcccact tgagttgttg gagtagtttt cgaaggcttg catgatgtgg 360
ttggtgttgg ggtaattcac agacaagaat tttctgcgac cgtgtctatg ttttatggga 420

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aggagaatgg gtgcactttt cccacgagct cgataaaggt ggactgcgta naccatatgg 480  
gctctnttgc actgggttgc actcttctaa taanggcagn gatgccncnc nccgtttgct 540  
tnattatgta cncaacaaac aatgngaaac tctctgnttn ttgggagngc tttggatcgn 600  
tctcanntnc ccttnnaata anctttntnn gnngactttn agggcgangc ttnnnnata 660  
tgntaaccaa gggngntacn annnnnggnt ntaan 695

<210> 49  
<211> 625  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(625)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 49  
tttcccacaa tctttaatct tgctaataat ttcaattcat attaagatcg gaaaatagaa 60  
aatctataaa aaaaaacaaa aaaagtatct ttttttcatt gattttatct tcaattgatt 120  
tgtcactaac aaactgattc ctcttaaata tcacaaaagt acatgtcgat ataaatatga 180  
gattataaat tcatgatata tattttcgat tttacatat aatgtttttt ttatcttttt 240  
tagttcctaa taagcatttt taaatggctt atgttcctac tttgcatatc agggacccat 300  
taatgggacg aggttcactg cgagcatgaa caacgtggct ttcgttctcc cgaacaacgt 360  
gtccatcttg caggctcacc acctcggaat ccctggagtg ntcaccactg attttccggg 420  
gaagccgccg gtgaagttna attacaccg gcaatgtgag ccgntcgctg gggcaacctg 480  
ntccggggac aaaggcacac aagttgaagt ttgggtcgag ggngcagatt gggngtgcana 540  
gatactagca ttgcactcct gagaaccacc ctatccatct tcatggggac caattctaca 600  
ttggtgcaga nggttccggg aacnc 625

<210> 50  
<211> 621  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(621)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 50  
actggtgtac gatttagtgt tactagctat cccatgtaat aaatatataa atcttgaatc 60  
acaaggaatg atgcaatata tggttcctct aatagtaagt tatccacca aatctgaata 120  
taattaagaa gttgtattcg tctgaatgtt gtgtctaaaa gggttgattg atgaatgatg 180  
gctacatgtg agagtttgat aacaacagct agctagccat tagccaagcc actaactaga 240

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cattagtttt ggttggttgt cagacaaacc gttagacctg agaacgaaag cgtattaaac   300
aaaagatgat atgtagactt ttaatatataa aagagatgga gaaaccaa at tgagatttga   360
taggtgaact ataaatcatg acagtgcatt agacaagttg gtagagtttg ttactaactc   420
atcagattct taagaaaggc aaaaatagaa actacaccac atgtcgctag cgataacgtg   480
caatttataa ataaataatg gcttcatttt catgggttagt tataaattaa tgggtcacaa   540
ttcttaattt attaggaacg tataacttcat tttgagagtg tataaagttg gaagaagaaa   600
agggatatag aaagaataaa a                                     621

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<210> 51
<211> 480
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(480)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 51
aagctccgcn cggggaacct nnagagtcta cctgaatccc caagntngaa cgaatacttg   60
ccaacacaaa tacgggcgat gggaaacatc tgaagaccgc tccaaagcgc cncatactaa   120
attgnnagga aaatttatat ctgacctttc atgggtgggg ggtgcatctg ctataaggaa   180
gggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga   240
tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtgaa   300
cgaagacggc atgcaa atgc ctggtattca tctagttgat ttatttgaga ctgacaccaa   360
tacaagcggc gataaacatg attcccacta tgatgaagng ccatcatctt atgggtttga   420
gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga   480

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<210> 52
<211> 480
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(480)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 52
aagctccgcn cggggaacct nnagagtcta cctgaatccc caagntngaa cgaatacttg   60
ccaacacaaa tacgggcgat gggaaacatc tgaagaccgc tccaaagcgc cncatactaa   120
attgnnagga aaatttatat ctgacctttc atgggtgggg ggtgcatctg ctataaggaa   180
gggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga   240
tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtgaa   300
cgaagacggc atgcaa atgc ctggtattca tctagttgat ttatttgaga ctgacaccaa   360

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tacaagcggc gataaacatg attcccacta tgatgaagng ccatcatctt atggggttga 420  
gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga 480

<210> 53  
<211> 736  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(736)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 53

aatttattta gttgatataa ccactttcaa aaatctgact tacaagactc tttagaattc 60  
ataatagtga cacttgatta agttagatta gactttataa aacacgagtt tgattttttt 120  
tttaataata attaaggttc tagcttatat atattatata gttgatatag actactttca 180  
aaagtctgac ttaaaagtct ctttagtata cataataata taacctttta atttaggttaa 240  
aaaatttgtc cctaaataaa ttaataaatc caaacttata tacaagttaa taggcttaag 300  
tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca atgaaaacaa 360  
tataataata ataataataa atatattatt gttattaatt catagatttt attattacta 420  
ttatagaata atttgtgtgt atatatataa atatatagag agagagaggg tcattttata 480  
tgagtgagaa aattttaaata ttattatgaa ttttcaaaat taaaatcaca tgccatatga 540  
ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg ttttaaaaac 600  
taattttaat aacttatata taactatata agntaaaatt ngggtcataa aataagtata 660  
tcagntatth taaaaaaatt ataagntttc ataaataaat accaaatgat agtcccagg 720  
gatgggncag cttng 736

<210> 54  
<211> 642  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(642)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 54

ttaactttac acaacacacc accagagtgt aagctgtttc ataaaaaatg attgtttcgg 60  
gctttcggat cacaaggctt gtttagtatt cggtgaagaa gaaagaaata ggtgataaat 120  
aaagtggata gaaacataaa agaaaggaat aaagtaatga aaataagga gaagtagaat 180  
aatggaaata gataagaaat agaattgatt cgatagtata tctagttaa gagaaataag 240  
aaaaaataag aacaagaaaa aaaattgcat ttttaattat tatttgtact gtatcgatga 300

ttggcacgag attataagtt ttttttttcg tgtttacggt gaaggattat atatcatacc 360  
atgtgtttgt caaccaacac ggaactttta gtctcttgat gttcaaaagc acttaaaaact 420  
aaggaatttt acatcatatt agtcgctgta gactgataca ggattttaag cctatatatc 480  
tagcattgat cgggtgtcaa tcaatatcac attaatgac ggtaaaccat tcatataacc 540  
cctttgattg gtcaagaaat ggctttatga atncccagga ttgagcccag aagacagggtg 600  
atactagggt caattcatgg ttttaggata ggctcgtaaa cc 642

<210> 55  
<211> 659  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(659)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 55  
aaaaggacct aaaagcaaaa agaaaattga gtatccttag gaattaaaaa tattccaata 60  
aaaataaaat aaagatccaa atgatagtgg gataaccgaa gaggaatgtc tttcaaccac 120  
tgcctgaccg ccaccactgc caacagccta gtatcaaccg aatccacata taccaacaat 180  
cttcagacaa acacttctaa gttggtgctg aagagacaat atctcatggg tagatcaaat 240  
taagagtgtc accaataaca aaatcgggat catttgacta acaaacagtt atgtgcattg 300  
gatgttctac catagtacat tgctttatgt gaaattcttt taattattca atattgacat 360  
gntcttatat atatatatat atatatatat atatatatat atatacgagg gattgnatta 420  
tctctgaaaa aagattttat cataaaatca taatgatttc tcataatgna tctttacatt 480  
ttaaaggtag ataaataaaa ttgatttaaa tnggnagata taattaaaat acataattaa 540  
tatgactttt aaccaaattg atatataaac acttaaaaaa aagttcatga acgnccgggg 600  
ngnattggnt gggncaaaaa aaaattaata ctatcaacct aattaaaaat tattttatan 659

<210> 56  
<211> 805  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(805)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 56  
ccaatgccag agcttcctta tcgtggggccc cacctatgaa gaatacacc acgttgaaat 60  
acatgttggt gttgttgga cgcgccagcc gagagtgccg gtccacgagt atccccaacg 120  
tgcattggcg atgcgcttga aacctagtat tcattcttct gatggaggca gccacgtgtc 180  
cgacaagggt aatgttgccg ttttcgtgaa aagggtgat aatgaaaggc accatattgt 240

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cttgggcgag gttgaaaatg gcgtcgtgca tgctcttgta aggtgccacg ttgatgtagg 300
gaagaacctt gactggccca cttgagttgt tggagtagtt ttcgaaggct tgcattgatgt 360
ggttggtggt ggggtaattc acagacaaga atttctctgc accgtgtcta tgttttatgg 420
gaaggagaat ggggtgcactt ttccccacga gctcgataag gtggactgcg tagacgcata 480
tggtggtctc ttgcactggg ttgcactctt ctaataaggc agtgatgcca cgcacgtttg 540
ctttcattat gtacacaaca aaacaatgtg aaaactctct gtttcttgga ggtgctttgg 600
atcgttctcn agttccccct cgaataagct ttctgcgtgn tacttctnagg ggcctnatgt 660
ttgtaccaat atgnttance caaggngnt tncattncn ggtctttact accacnacat 720
aacaccnat tnnatgaann gnancnatc caacntctac naaancgtna tcaatnacnt 780
tnnatngat ttgannact ggccn 805

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<210> 57
<211> 632
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(632)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 57
tttagaattc ataatagtga cacttgatta agttagatta gactttataa aacacgagtt 60
tgattttttt tttaataata attaagggtc tagcttatat atattatata gttgatatag 120
actactttca aaagtctgac ttaaaagtct ctttagtata cataataata taacctttta 180
atntagttaa aaaatttgct cctaaataaa ttaataaatc caaacttata tacaagttaa 240
taggcttaag tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca 300
atgaaaacaa tataataata ataataataa atatattatt gttattaatt catagatttt 360
attattacta ttatagaata atttgtgtgt atatataata atatatagag agagagaggg 420
tcattttata tgagtggaga aattttaaata ttattatgaa ttttcaaat taaaatcaca 480
tgccatatga ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg 540
ttttaaaaac taatttaaata aacttatata taactatatc agttaaatgt gggtcataaa 600
ataagtatat cagttatttt acaaaattat aa 632

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<210> 58
<211> 437
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

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<400> 58
cttttgacac tatngaatac gaattcgaat gtcggagcgt gcagatacga gggtagctt 60
gttttaggttt gttatcgtga acaagaaacc gtgtggttgt aaaattatTT tgacaagaga 120
agagcgtgaa gaggaagagg aagataccat gttggacgag gggttaattg acgagttcaa 180
gagcatgaaa tatggcattg gtaacgtttg ttggtacgag attacggtgg acgatggggT 240
ggaggtggtg gaagcagtgc atagtttgga aggaaactat gatcttTgtga tggTgggaag 300
gcgccacaat gatggatctt tgaatggaaa agaaatgaca actttcatgg agaacgctga 360
tgcattggga atattgtggg atatgttccc ttcnccanc ntgnntggcn tngttccgct 420
tttttcgnet ntngcc 437

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<210> 59
<211> 681
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(681)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 59
ggnttcttta gggcttcaaa atttgatcct agatcataac ttttttact ggtgacgttc 60
ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagtTTa 120
gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta 180
ataatgcctt gaatgggaac ttgcctgcta cctctcttaa tttatcctca cttacactgc 240
tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta 300
atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg 360
caaacatttc ctgcttagg cagcttgatt tgactgaat aatttcagtg gagaaattcc 420
agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggttcctaca atagcctctc 480
agggtctgcc cccctctgct tggcaagaaa tttaactcaa gctcatttgt gggaaatatt 540
caactatgtg gggtagagcc ttcaacccca tggttttcca agctncatca caagggggca 600
ttggccccct cctgagnggc aaacatcacc atcataggaa gctaacccca aagacataat 660
tctcatagta nccaggaggT n 681

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<210> 60
<211> 644
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(644)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 60

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acaacaagca acgaacagct tttaacctta aactaggcta atgccaatat taaagaagaa      60
ataattaaaa ttgtaaggct ggtcgtgtat aaattaaaca aaaggccctc tattcaaacc    120
ttcatatatac atacctgttt ttaattaacg cggactactt tttcatataa aaaaaagatc    180
attagaggat taattttaaag cgttttagtt ttttaattacc aaagagtata attattatta    240
ggcgctttgt cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaagtcaa    300
attggactaa tgcaaaagtg gcacaatctt tgtcttgaac tctttaatta gcaacaaatt    360
atactcttct gcacaaatca caagaatacc ttacatgaaa agaattggtaa tttgacgggt    420
tacattaaat tatatgcagt tttctgcagg taattaattt tcaagaattt aagggtgggt    480
ggtaattttc aatagctagc ttgactagca aaggaaagaa taaaggtaaa atgcttcttg    540
gtttggcctt ttggattggt atactttttg ctaaacggaa atggttatat gaatggtaaa    600
ggagataaat tggtagatag ctaaaatggt atagncttaa tccn                        644

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<210> 61
<211> 678
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(678)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 61

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aaattcattt aacttctcta atttttaaat cgatcaaatt tggtttttca atctaaaata      60
taagaaacta tattttgtga tgggttttaa atcgacatta agtgttctta atctaccaca    120
aaaagcacat ttccaaaaaa ataaattaat tttaaaaatt ataagatcaa attgaatcaa    180
ttttaaaaat taaaatatta aattgaaaaa aaaaataaag gatcaaattg aacataaata    240
ataaatttga ggattaaaaa actaatttaa cctttaattt tttctcactt atattaatat    300
taaaaaatta tattgatttt cctaataact ccttatctca attaaaattt ccaaaaatta    360
attctagcat cttcaaacac tactcaccat gaaagtccat cacaaccatc tttctttctc    420
ttttctctac atcatgtttt cgcttcgcaa actttattgt gttcctagtc ttagacgtct    480
gataatcttc cacaagtatt gaactataac acttattgga cttgcaccgg taatagctaa    540
caccaaatga gacgtgcact tgacttttat atcactaaga aaatttcaac acattgacca    600
agattagctc catcttgctt taacacttgg ttgactagtc acttaagtgc aacaaccact    660
ttgatatcat tgggtgga                                           678

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<210> 62
<211> 571
<212> DNA
<213> soybean

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<220>
<221> misc_feature
<222> (1)..(571)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 62
tcttttaaga ccattcgaca ctatagaata cgaattccat aattaacaat aaagtcacat 60
tctattatat attttttctt cttaaattac atgatatgat ttcattcatta ttgacaata 120
atgatatttt tatctcataa atattatttt gttttaaaaa tattcatagc acacacgagt 180
tttttatatc aacaaagagg tatcacttca gttgggtcaat ttgggtctaac ttttagacaa 240
tgtcgtatag ttgaattgaa ttggaatttg gcagtatata ttttactttt tgccccctta 300
ttttcaatca aattagagta gacgcctcgt attattggca tacatggata ttggatcggc 360
acctgtgttt cagacctgag tcacatctga ctcgatcgca ttttatctta catgaaaatt 420
ccaaaataat gaaagatatg gcaattggca ccatgtaact ctatggacac caatgcttca 480
ccgtagagct ctaaatttcg aggccttcta tatatagctt tgcggtgacta tgtnaaatta 540
ntcaatatcn tnttaatttt ttgnggcc c 571

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<210> 63
<211> 856
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(856)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 63
aattagttgt cttgtttatt cattaccttt tcaatttttt taatcaccat aattaaggcc 60
tttcgaatcc ctttaagtga taaaagaaac gtgcaattat gcgaacaaat aaattttcgt 120
tatgttacta tttagtcaag gaggaaaaaa aagtgataag ggaagaaaca agggatat 180
cctgttataa caaacttaaa atggcgacta ttttgacgac attgcaaata ctcatagtac 240
gatataaatt ttgaatttaa tatacaatga ataggcatat tcatttttcta ccccaaaaaa 300
gcatactcat ttatgtacat ttaattttct ctccatagag gaattaatgt acaacctatgc 360
ataagggatg agcgaaaggg acagattatt gcaatccaga agcatccaag gaaagttgga 420
taaacaaatc aattaatata tataaaaaaa aaacaaaaat gtccttagta gaagattaaa 480
ggaagagttg gctatatatg gcaaaccctt tctaactggt ttaccctctt ctcatcacc 540
gcattgcac accaatcgg gaacttttcc cattacaaaa ctcatggaa gccaacatat 600
ccccaaaaat tccactggat ctgcattgtc catgaaattt gacatttctt cttctacaaa 660
attcccatgc tatgtcgttt tccaccatcc taggtcatag tcctttcttca ttccccgaat 720
cgnttcacac ttgtatgcaa tcttccacc cagcctcatg ggaaacaccg ntaacactat 780

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cactctaata tcattcttgg cataaactca tctataaacc tctcgncac gggctcttta 840  
aattctcatc ttnttn 856

<210> 64  
<211> 639  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(639)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 64

ttcccttgg gtcccaagta ataggccctc agagccaaaa cattgggggtg tctaattttt 60  
cctagaacac tgacttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat 120  
ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccatagggtg 180  
ctctttccca tgatctcagc tggtgcacac aagagatcat cagctgtaaa agccattgggt 240  
ccatcaaaat ggactagttt cctccagcc tcccacctg cttcaacatc accaccagca 300  
actggaggga ctcttttttc tgtcctcata gtggccgctc taccctcggg ggcttggccg 360  
tcccgccctt agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta 420  
taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt 480  
ctatgatggg gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct 540  
tgggaaagac atggggttga agggctggac ccacatagtt gaatatattcc acaaatgagc 600  
ttgagttaaa attcttggca agcananggg ggacagaan 639

<210> 65  
<211> 495  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(495)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 65

ttcccaatgc cggagcttcc ctatcgtggg cccacctat gangaatata cctcgaatg 60  
aaatacatgt tgttgntgnt ggacgcgccc agccgagagt gccggtccac tagtatcccc 120  
aacgtgcatg gcgcatgcgc ttgaaaccta gtattcatct tctgatgga ggcagccacg 180  
tgtccgacaa ggtcaatggt gccgttttcg tgaaaagga tgataatgaa aggcaccata 240  
ttgtcttggg cgagggtgaa aatggcgctc tgcagtctct tgtaagggtgc cacgttgatg 300  
tagggaagaa ccttgactgg cccacttgag ttgttggagt agttttcgaa ggcttgcattg 360  
atgtggttgg tgttggggta attcacagac aagaattttc tgcgaccggg tctatgtttt 420  
atgggaagga gaatgggtgc acttttccca cgagctcnat aaggggggact gcntanacnc 480

atatggggct ctctt

495

<210> 66  
 <211> 480  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature  
 <222> (1)..(480)  
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
 <400> 66

cnttcttaga atcgaattct ttggtatcag aacatatcag tcatttttaa agaataagaa 60  
 attaaattag acttaatttt taagagtatg gattaaatg taaaatttgt ggggattata 120  
 aacataaata agtaattttt cctatatgag acattttattg aaatcttaag ataagatacg 180  
 tacatgcaaa ttaaattgat gcatgataat agaattaggt gaatagtcca atacctgaca 240  
 cctcttttgt ccgaagtgtt tggggcactt cttgatacct aaaccacag tgaagaagag 300  
 gctctgtgca atttcagtgg gtacttcaac ttttctaggg cttctgaagc ttttctgaa 360  
 ggaagtgact gcgttttgtt ccgttgtaag cagggagtgg aggcattata gggttggttt 420  
 tgttctttac tcctttggca cgatggtgag aatgcttatt gtggtgattc ggtgatttgt 480

<210> 67  
 <211> 669  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature  
 <222> (1)..(669)  
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
 <400> 67

atgccccaaa aatttaccta aaagcaaata aaaaagatga gtatttcttt taaattaaaa 60  
 atattttaat aaaaataaaa taaagatcca aatgataatg tgataaccga agaggaatgt 120  
 ctttcaacca ctgcctgacc gccaccactg ccaacagcct agtatcaacc gaatccacat 180  
 ataccaacaa tcttcagaca aacacttcta agttggtgct gaagagacaa tatctcatgg 240  
 gtagatcaaa ttaagagtgc taccaataac aaaatcgga tcatttgact aacaaacagt 300  
 tatgtgcatt ggatgttcta ccatagtaca ttgctttatg tgaaattctt ttaattattc 360  
 aatattgaca tgggtcttat atatatatat atatatatat atatatatat atatatacga 420  
 gggattgtat tatctctgaa aaaagatttt atcataaaat cataatgatt tctcataatg 480  
 gatcctntaca ttttaaaggt agataaataa aattgatttt aaatngggag atataattaa 540  
 aanacataat taatatgact tttaacaaat tgatatataa acacttaaaa aaaagntcca 600  
 tgacgcacng ggggnattgg tgggacaaaa aaaattatct atcactaatt aaaantatta 660

taaatatan 669

<210> 68  
<211> 486  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(486)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 68  
tgggtgtatat aattaaaatg agtttaatat ttatgtatta atagtataaa atttatcata 60  
catgatgaat ggtgaaattt tgaattatga ttaaataatt atataaaaaa atttacatga 120  
tgaatgaata actttttttt tctcaattaa aattatgata ctttgtcgat atgttttact 180  
gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag 240  
aaggagaga gaagttgact tatcctttta ttagttttaga gaaaattaga cgagaaggaa 300  
aaaaaatagg cgaaagtcac tttttctttc tatctctacc aagaatgttg atgaaaaagt 360  
ggggagcaga attttaaatt tttattttca tatttatcct tctccacatt tttgntttct 420  
tccatttttt tataaaanga tttatttttag gcatagntaa cttttcaatt tttttcattt 480  
ctatttc 486

<210> 69  
<211> 779  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(779)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 69  
tatttgtaaa ttgtttttta taattgaaaa gaaaataagg ttaaattatt ttcataataa 60  
aaatttaatt tgttcttata agttattttg aaaattttat taaaataagt tgaaaacaat 120  
ttataaataa atcataaact ataattttat aagttttctt aaatacttac acgtatgcca 180  
taaaataagt tcagataaga tataaataaa ttcttccaaa cacatcttaa atctatatatt 240  
ttttaaaaca aactttcatc gttaaaagga tattataata ataataataa acttcaatca 300  
ttaacaatta atatatgtgg ataaaagagc attcaaaatg atattttatt agcacatgac 360  
aatcacatt actctcaagc tattttttta aactaataaa aacttacata ttatatgata 420  
tgatatatac tctctctata ttacactttt ttgagataa acaaggataa aaaatgatgt 480  
aaatatgacc gcatataata ttattttataa tgtacggaat gccgtttttg acattttata 540  
taatatatct gggggcaatt attttcttaa ccaataatta gcaaattttt atcttgcttt 600  
ttctccatgg gggctaaatt aaactaaagg gncgtaccca atccagtccc actttttttt 660

aaataattnn tttccntccc acttagnaaa ggagtnnttn ggcttaaata ggcagnncca 720  
ttaaccataa gcctttnttg taaggagtct taccaantaa aatggggaag gcccccccc 779

<210> 70  
<211> 677  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(677)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 70  
ttattggctt aacttgagtt tcaactcctt ctctggctct ttaccagcta gcctaactca 60  
ctcattttct ctacttttc tttctcttca aaataacaat ctttctggct cccttcctaa 120  
ctcttggggg ggggaattcca agaatggctt ctttaggctt caaaatttga tcctagatca 180  
taactttttc actggtgacg ttctgcttc tttgggtagc ttaagagagc tcaatgagat 240  
ttcccttagt cataataagt ttagtggagc tataccaaat gaaataggaa ccctttctag 300  
gcttaagaca cttgacattt ctaataatgc cttgaatggg aacttgctg ctaccctctc 360  
taatttatcc tcacttacac tgctgaatgc agagaacaac ctcttgaca atcaaattccc 420  
tcaaagttta ggtagattgc gtaatcttct tggtctgatt ttgagtagaa accaatttag 480  
tggaacatatt ctttcaagca ttgcaaacat ttctctgctt aggcagcttg atttgcactg 540  
aataatttca gtggagaaat tccagctcct ttgcagtcag cgcagctaaa tctcttcaat 600  
ggttcctaca atagcctctc anggtctgtc cccctctgc ttgccaagaa atttaactca 660  
agctcatttg tgggaat 677

<210> 71  
<211> 571  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(571)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 71  
tggtgactggc tgtgactgat ctctctggct taatctcttc cagctgctgg agaacttgat 60  
gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt 120  
ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat 180  
ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag 240  
acaccccagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat 300  
cagttttagt gtttgcttct ttgagctttg agagctcagg tgcccgggat cccaatgctt 360

cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agaccaaataat 420  
ctgcaatttt agcatttgna ttctcattaa acaacacaat gntggatgng anggtncat 480  
ggatgaaggt cttctnggna agnaagnaaa acaaagcacc gggccaaggn ttgggctaata 540  
ttcaaccttg gggggcaaac naanaaatgt t 571

<210> 72  
<211> 756  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(756)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 72

attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact 60  
cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttnctaact 120  
gtgggggggg gaatancaag gngggcttta ggctgcaaaa tttgatccta gatcataact 180  
ttttactgg tgacgttcct gcttctttgg gtagcttaag agagctcaat gagatttccc 240  
ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta 300  
agacacttga catttctaata atgccttga atgggaactt gcctgctacc ctctctaatt 360  
tactctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa 420  
gtttaggtag attgcgtact ctttcctggt ccgattttga gtagaaacca atttagtgga 480  
catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata 540  
atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa 600  
tggttnctac aataggcctc tcagggtctg gcccccttt gnttggccaa ggaaanttaa 660  
cttaagctta tttgngggg aaanattcaa ctatgggggg acncggccct ttaaacccca 720  
gggnttttcc caggttcctt ccaaggngc anttgt 756

<210> 73  
<211> 557  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(557)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 73

tgtgactgat ctctctggtc taatctcttc cagctgctgg agaacttgat gaacttctgg 60  
tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt ttagcaactc 120  
gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat ttgtccactc 180  
ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag acnccccagg 240

tgatttcntc gttaggagtt ntaacaagat aacaccaaga ctgtagatat cagtttttagt	300
gtttgctttc ttgagctttg agagttaagg gncccggant cccannngntc nagttgnagt	360
tatancgttg gaattagcag nagttgcntc aaccgaaaaa gaccaaaatc tgaatttttag	420
catttgtttt tcatcaagca acacattgnt ggatgngagg tcccatgtat gatgttctcc	480
tggaatgaa ggcaaacaag cccgggcca ggcttgggct attttaatcc ttggtggcca	540
aacaatgaaa ggttnat	557

<210> 74  
 <211> 673  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature  
 <222> (1)..(673)  
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
 <400> 74

gggactggct gtgactgatc tctctggtct aatctcttcc agctgctgga gaacttgatg	60
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt	120
tagcaactcg tcgccaactg tggatgcatc tctcatcaag tctgcatcaa aaacctcatt	180
tgtccactcc tctttgacaa ctgaggcaac ccaactgaggc aaatctagtc cattcataga	240
caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac ttagatatc	300
agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaatgc	360
ttccagctgt agcttatcac cggtgggaat taagcagcaa gttggacatt caacccggag	420
naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc	480
aaccaccaat tggnttggga atgggtggaag ggtttcccca atggtaattg gaagggtttc	540
ttccctnngg gaaaatggaa aggggcaana aaacaaaggc ccaacnnggg ccccaaagg	600
nttttggggg ccttattttt tncnaatncc ctttggnnng ggncccaaat tcnaaantgg	660
aaattggntt tnn	673

<210> 75  
 <211> 602  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature  
 <222> (1)..(602)  
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
 <400> 75

aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta	60
gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga	120

gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg	180
aataactgaa cccctctaag gttgggaaga agtcccaaag ttgaagggat tgaaccacca	240
atttggttat catgaagact aagcttcctg aggccttgaa gttggccaat tttggcggtg	300
attcgacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac	360
ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa	420
gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga	480
taggaggggtg cttcttcctt ttcactggnc tacctcttcg ggaataagcc acctaagag	540
aaagaaagan ctgggatagc taactctaca tagnctcaag gcnagagata attagggaaa	600
ng	602

<210> 76  
 <211> 748  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature  
 <222> (1)..(748)  
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
 <400> 76

attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact	60
cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact	120
cttgggggtgg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata	180
actttttcac tggtgacgtt cctgcttctt tgggtagctt aagagagctc aatgagattt	240
cccttagtca taataagttt aatggagctg taccaaatga aataggaacc ctttctaggc	300
ttaagacact tgacatttct aataatgcct tgaatgggaa cttgcctgct accctctcta	360
atttatcctc acttacactg ctgaatgcag agaacaacct ccttgacaat caaatccctc	420
aaagtttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg	480
gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcaactgaa	540
taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc	600
aatgtttcct acaatagcct ctcanggtct gnccccctc tgcttgccaa gaaatttaac	660
tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn	720
ccaagcttca tacaaggagc atggccct	748

<210> 77  
 <211> 563  
 <212> DNA  
 <213> soybean  
 <220>  
 <221> misc\_feature

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<222> (1)..(563)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 77
ctggctgtga ctgatctctc tgggtctaate tcttccagct gctggagaac ttgatgaact    60

tctggtcgtg ctgatggaga aggatcaaca cagtgcaaag cgagcttcaa cgtgttttagc    120

aactcgtcgc caactgtgga tgcattctctc atcaagtctg catcaaaaac ctcatattgtc    180

cactcctctt tgacaactga ggcaaccac tgaggcaaat ctagtccatt catagacacc    240

ccaggtgatt tctcgttag gagttctaac aagataacac caagactgta gatatcagtt    300

ttagtgtttg ctttcttgag ctttgagagc tcaggtgccc ggtatcccaa tgctccagct    360

gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc    420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat    480

gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggtta tttcatcctt    540

gtggccaatc aatgaatggt cat                                           563

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<210> 78
<211> 623
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(623)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 78
gattttgcac atctacttga gtaggcttca catgattccg tgtattactt ttatttttgg    60

atatatacca tgtggagtat agtatcactt tttgtcctac aaccacattt tatgagactt    120

gcattttatg tgacatgaac ataaaaaata atgaaaaaga aaatgtcaca tatatatgat    180

acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa    240

atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa cttaaatgaa    300

aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggtttta gcacaagggtg    360

aatccaaata aagaccccaa aagatagtag agaacccaac aatggtaaaa tctagaaata    420

tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga    480

tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc    540

atttatttaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt    600

acatgaaatc tgtcaccaag tac                                           623

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<210> 79
<211> 605
<212> DNA
<213> soybean
<220>

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<221> misc_feature
<222> (1)..(605)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 79
ctcccgggtc ccaagtaata gggccctcag agccaaaaca ttgggggggc taatttttcc      60
tagaacactg acttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct      120
ctttactgca acttgacttc catcctccaa aatagcctta taaacagntc cataggtgct      180
ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattgggtcc      240
atcaaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac      300
tggaggggact ccttttttctg cctcatagtgt gccgctctac cctcggtggc ttggccgntc      360
ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata      420
atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc      480
ctatgatggg gatggttnga cacttcanga gggggggcaa tgactccctg gganggagct      540
tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaaangag      600
cnngn                                                                    605
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<210> 80
<211> 711
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(711)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 80
ttaangncca acgactcact atagggcgaa ttggggccga cgtcgcatgc tcccggccgc      60
catggccgcg ggattggctt aacttgagtt tcaactcctt ctctggctct ttaccagcta      120
gcctaactca ctcatTTTTt ctacttttct tttctcttct taaaataaca atctttctgg      180
ctcccttctt aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaattt      240
gatcctagat cataactttt tcaactggtga cgttcctgct tctttgggta gcttaagaga      300
gctcaatgag atttccctta gtcataataa gtttagtgga gctataccaa atgaaatagg      360
aaccctttct aggttaaga cacttgacat ttctaataat gccttgaatg ggaacttgcc      420
tgctaccctc tctaatttat cctcacttac actgctgaat gcagagaaca acctccttga      480
caatcaaatc cctcaaagtt taggtagatt gcgtaatctt tctgttctga ttttgagtag      540
aaaccaattt agtggacata ttcccttcaag cattgcaaac atttcctcgc ttaggcagct      600
tgatttgta ctgaataatt tcagtggaga aattccagtc tcctttgaca gtcagcgcag      660
tctaaatctc ttcaatgttt cctacaatag cctctcaggg tctgtcccc n              711
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<210> 81
<211> 716
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(716)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 81
ttntgaaaa ccctttgcta tttagggtgac actatagaat actcaagcta tgcattccaac      60

gcgttgggag ctctcccata tgggtcgacct gcaggcggcc gcactagtga ttaatacgac      120

tcactatagg gctcgagcgg ccgcccgggc aggtgggact ggctgtgact gatctctctg      180

gtctaattctc ttccagctgc tggagaactt gatgaacttc tggtcgtgct gatggagaag      240

gatcaacaca gtgcaaagcg agcttcaacg tgtttagcaa ctcgtcgcca actgtggatg      300

catctctcat caagtctgca tcaaaaacct catttgtcca ctctctcttg acaactgagg      360

caaccactg aggcaaattc agtccattca tagacacccc aggtgatttc ctcgtttagga      420

gttctaacaa gataacacca agactgtaga tatcagtttt agtgtttgct ttcttgagct      480

ttgagagctc aggtgcccgg tatcccaatg ctccagctgt agctatcacg ttggaattag      540

cagcagttga catcaaccga gaaagaccaa aatctgcaat tttagcattt gtattctcat      600

caagcaacac attgctggat gtgaggttcc catgtatgat gttctcctgg gaatgaaggc      660

agaacaagcc acggggccaag tcttgggcta ttttcattct tgggtgggcca atcaan      716

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<210> 82
<211> 713
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(713)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 82
ttcctaangc ctacgactcc tatagggcga attggggccg acgtcgcatg ctcccggccg      60

ccatggccgc gggattatac gactcactat agggctcgag cggccactat gaggacagaa      120

aaaggagtcc ctccagttgc tgggtggtgat gttgaagcag gtggggaggc tggagggaaa      180

ctagtccatt ttgatggacc aatggctttt acagctgatg atctcttggt tgcaacagct      240

gagatcatgg gaaagagcac ctatggaact gtttataagg ctattttgga ggatggaagt      300

caagttgcag taaagagatt gagggaaaag atcactaaag gtcatagaga atttgaatca      360

gaagtcagtg ttctaggaaa aattagacac cccaatgttt tggctctgag ggcctattac      420

ttgggaccca aaggggaaaa gcttctgggt tttgattaca tgtctaaagg aagtcttgct      480

tctttctac atggtaagtt tcgtgtgctg ttctttcatt aagtgttggt tgtgctgttc      540

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tttaattata atttggagtt ttaccttagt aatctgtata attctaatacg gagaacagta 600  
caaacaaaaa cacctaagga acaacacctt anctttaata taccatatca ataagtgaat 660  
tattttctta ttcattctga tgcagggtgtt ggaactgaaa catttatttg atn 713

<210> 83  
<211> 712  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(712)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 83

nnnctaaggc ccnttactca ctatngggcg aattggggccc gacgtcgcat gctcccgccc 60  
gccatggccc gcgggattgg cttaacttga gtttcaactc cttctctggt cctttaccag 120  
ctagcctaac tcaactcattt tctctcactt ttctttctct ttaaaataac aatctttctg 180  
gctcccttcc taactcttgg ggtgggaatt ccaagaatgg cttctttagg cttcaaaatt 240  
tgatcctaga tcataacttt ttcactgggt acgttcctgc ttctttgggt agcttaagag 300  
agctcaatga gatttcctct agtcataata agtttagtgg agctatacca aatgaaatag 360  
gaaccctttc taggcttaag acacttgaca tttctaataa tgccttgaat gggaaacttgc 420  
ctgctaccct ctctaattta tctcactta cactgctgaa tgcagagaac aacctccttg 480  
acaatcaaat ccctcaaagt ttaggtagat tgcgtaatct ttctgttctg attttgagta 540  
gaaaccaatt tagtggacat attccttcaa gcattgcaaa catttctctg cttaggcagc 600  
ttgatttgca ctgaataatt tcagtggaga aattccagtc tcctttgcag tcagcgcagt 660  
ctaaatctct tcaatggttn ctacaatagn ctctcagggt ctgnccccc tn 712

<210> 84  
<211> 681  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(681)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 84

ggnttcttta gggcttcaaa atttgatcct agatcataac ttttttctact ggtgacgttc 60  
ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttta 120  
gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta 180  
ataatgcctt gaatgggaac ttgcctgcta ccctctctaa tttatcctca cttacactgc 240  
tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagttaggt agattgcgta 300  
atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg 360

caaacatttc ctcgcttagg cagcttgatt tgcactgaat aatttcagtg gagaaattcc 420  
agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggctcctaca atagcctctc 480  
agggtctgcc cccctctgct tggcaagaaa tttaactcaa gctcatttgt gggaaatatt 540  
caactatgtg gggtagagcc ttcaacccca tggctttcca agctncatca caagggggca 600  
ttggccccct cctgagnggc aaacatcacc atcataggaa gctaaccocca aagacataat 660  
tctcatagta nccaggaggt n 681

<210> 85  
<211> 639  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(639)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 85  
tcccttttgg gtcccaagta ataggccctc agagccaaaa cattgggggtg tctaattttt 60  
cctagaacac tgacttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat 120  
ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccatagggtg 180  
ctctttccca tgatctcagc tggtgcacac aagagatcat cagctgtaaa agccattggt 240  
ccatcaaaat ggactagttt cccctcagcc tccccacctg cttcaacatc accaccagca 300  
actggaggga ctcctttttc tgctctcata gtggccgctc taccctcggt ggcttgccg 360  
tcccggcctt agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta 420  
taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt 480  
ctatgatggt gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct 540  
tgggaaagac atggggttga agggctggac ccacatagtt gaatatattcc acaaatgagc 600  
ttgagttaaa attcttggca agcananggg ggacagaan 639

<210> 86  
<211> 661  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(661)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 86  
gaaggatggt tattttgaag agaaagaaaa gtgagagaaa atgagtgagt taggctagct 60  
ggtaaaggac cagagaagga gttgaaactc aagttaagcc aataaagctt agtggaatta 120  
gcaagactat aagggtattgc tctgtgagc aagttgttgc tgaggtaag agactgaagc 180

aaagggcaga aacctaaaga aagaggatg gaacctgtaa gcctattggt gaataactga 240  
accctcttaa ggttggaag aagtcctaaa gttgaagga ttgaaccacc aatttggtta 300  
tcatgaagac taagcttctg aggccttgaa gttggccaat ttgtcggtg attcgacccc 360  
tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac ttgattccaa 420  
cccacctccg gaacaagctc catagccact gtcattccag cttccgcaag aaccttctg 480  
gatcagccaa ctcttgcttg aaaagcttat cacatgtacc ttttacagat aggaggntgc 540  
ttcttccttt cactggctta cctcttcgga ataagccaac ctaatgagaa agaaagatct 600  
gngatagctn atttacatac tnagncagag ataattantg naagcnnaag ttaaacntnt 660  
t 661

<210> 87  
<211> 626  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(626)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 87

aattcgtggg ctacaaagga tgaacgtaaa ctatatgcac ctccagctgg ttcaggcttc 60  
atatctggct ttacttctat ctcacgcaga tcttctgttg atagtactca aaatctgtct 120  
attccttttg gtccaagctc atacctttct gcacaggctc gagtagttga tgagtattct 180  
atgtcccaga ttatcttaca aaatgtgctt gatggagggg tcaactggat gttaatagtt 240  
gtcactgggtg caagccatgt tacatatgga tctagaggaa ctggagtgcc agcaagaatt 300  
tcaggaaaaa taaaaaagaa aaaccatgca gttatattac ttgacctga aagacaattc 360  
attcgagag aaggagaagt tctgttgct gatTTTTTgt ggtattctgc tgcgagaccc 420  
tgtagtagaa attgctttga ccgtgctgag attgctcggg ttatgaatgc tgctgggcgg 480  
aggcgagatg ccctcccaca ggtaaacc aaattacagt tactaatttg tttgactggt 540  
aatcttcttg ccccatagac cctncttcca atttttagcc ctttatgtcc tctcattcct 600  
agngggataa gggtttgggg gnggtg 626

<210> 88  
<211> 627  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(627)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 88  
tgaaaaactg aaggaccaa ttaaatctaa aaaataaata aattaaaaga ctaaaaaata 60

aatctatcca aaattaaaag gtttattctt ggaagtaatg aaatgtatth tgactctttg 120  
aagaatgcat tactataatg aaagagtagg tggagagagg ggataataaa atcccactaa 180  
ataacatcca tgactatcac tataaaaaaa aatattatta ttaagataag aagaattatc 240  
taacttgaat aagagactac taccaaagtg agaaaaaggt cttataacat agagtthttc 300  
aagthttacct ataaaacttg taataagatt tgthtttcaa ccatctaatt thttattagt 360  
gtggactgca taaaaaaaat atagtaacaa gaaactacta aattagactt thtgaactat 420  
tcattgtatg gctgccatga aacctacctg cctggagggg tgggtccac gtaagactgt 480  
aagagggagg aggggaagcac tagtcacaca ccggcgcacg ttagcgaggc aatgttccta 540  
gattgaaacg gagaaggtga ttagaggggc ggaaatctca aagcagacac aggcaactaa 600  
thtatcgctt cthtctcat tcgctta 627

<210> 89  
<211> 782  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(782)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 89

cacataatta acaataaagt catcttctat tatatattht thtctcttaa attacatgat 60  
agtatttcat cattatttga caataatgat atthttatct cataaatatt atthtgttht 120  
aaaaatattc atagcacaca cgagtthttt atatcaacaa agaggatatca cttcagttgg 180  
tcaatttggc ctaactthta gacaatgtcg tatagttgaa ttgaattgga atthtggcagt 240  
atatatttht cthtttgccc ccttattht aatcaatta gtagtagcgc ctcgtattat 300  
tggcatacat ggatattgga tcggcacctg tgthtcagac ctgagtcaca tctgactcgg 360  
atcgatttht tcttacatga aaattccaaa ataatgaaag atatggtaat tggcaccatg 420  
taactctatg gacaccaatg cttcacgtag agctctaaat ttgaggcctt ctatatatag 480  
thtgcgtgac tatgtaaatt atcaatatca thtaatttht ttgcgaccac gaaatatacg 540  
aatttattat tgaacacaaa aagtagagtg tatattthta gtctaggatt ttatgagagg 600  
caaaaataag aataacctt tgatatatt thttggatac actthcttht ttatatattt 660  
thtaataatg gattataatt tattggaaac aatcaatta tangggaaaa thcattggaa 720  
taaaagaang aaattthaaa aaaaatataa ththtaataa atthtaagtaa taaaatcct 780  
tt 782

<210> 90  
<211> 160  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(160)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 90  
tggttgagat gtgtataaga gacagttgcc ccacctcctg aagtgcaaaa acatcaccat 60  
cataggaagc taagcaccaa agacataatt ctcatagtag caggagttct cctcgtagtc 120  
ctgattatac tttgttgtgt cctgcttttc tgcctgatca 160

<210> 91  
<211> 779  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(779)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 91  
tgctcccgcc gcatggccgn gggattggct taacttgagt ttcaactcct tctctgggcc 60  
tttaccagct agcctaactc actcattttc tctcactttt ctttctcttc aaaataacaa 120  
tctttntggc tcccttncta actgtggggg ggggaatanc aaggngggct ttaggctgca 180  
aaatttgatc ctagatcata actttttcac tggtgacgtt cctgcttctt tgggtagctt 240  
aagagagctc aatgagattt cccttagtca taataagttt agtggagcta taccaaatga 300  
aataggaacc ctttctaggc ttaagacact tgacatttct aataatgcct tgaatgggaa 360  
cttgccctgct accctctcta atttatactc acttacactg ctgaatgcag agaacaacct 420  
ccttgacaat caaatccctc aaagtttagg tagattgcgt actctttcct gttccgattt 480  
tgagtagaaa ccaatttagt ggacatatc cttcaagcat ngcnnacatt tctctgctta 540  
ggcagcttga ttgtcactga ataatttcag gtggagaaat tncagtcctnc tttgacagtc 600  
agcgcagtct aaatcttctt caatggttnc tacaataggc ctctcagggt ctggccccc 660  
tttgnttggc caaggaaant taacttaagc ttatttgng gggaaanatt caactatggg 720  
gggacncggc cctttaaacc ccagggnntt tcccaggttc cttccaaggg ngcanttgt 779

<210> 92  
<211> 743  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(743)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 92

ttggcctaac ttgagtttca actccttctc tggtccttta ccagctagcc taactcactc	60
atcttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc ttcctaactc	120
ttggggtggg aattccaaga atggcttctt taggcttcaa aatttgatcc tagatcataa	180
ctttttcact ggtgacgttc ctgcttcttt gggtagctta agagagctca atgagatttc	240
ccttagtcat aataagttta gtggagctat accaaatgaa ataggaaccc tttctaggct	300
taagacactt gacatttcta ataatgcctt gaatgggaac ttgcctgcta ccctctctaa	360
tttatcctca cttacactgc tgaatgcaga gaacaacctc cttgacaatc aaatccctca	420
aagtttaggt agattgcgta atctttctgt tctgattttg agtagaaacc aatttagtgg	480
acatattcct tcaagcattg caaacatttc ctcgcttagg cagcttgatt tgtcactgaa	540
taatttcagt ggagaaattc cagtctcctt tgacagtcag cgcagtctaa atctcttcaa	600
tgtttcctac aatagcctct cangttctgn cccccctctg cttgccaaga aattaactca	660
agctcatttg tgggaaatat tcaactatgt gggacaggcc ttcaacccca ngctttacca	720
agcttcatca caaggggcat tgg	743

<210> 93

<211> 742

<212> DNA

<213> soybean

<220>

<221> misc\_feature

<222> (1)..(742)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 93

ttaacttgag tttcaactcc ttctctggtc ctttaccagc tagcctaact cactcathtt	60
ctctcacttt tctttctctt caaaataaca atctttcttg ctcccttctt aactcttggg	120
gtgggaattc caagaatggc ttcttttaggc ttcaaaattt gatcctagat cataactttt	180
tactggtga cgttcctgct tctttgggta gcttaagaga gctcaatgag atttccctta	240
gtcataataa gtttaatgga gctgtaccaa atgaaatagg aaccctttct aggcttaaga	300
cacttgacat ttctaataat gccttgaatg ggaacttgcc tgctaccctc tctaatttat	360
cctcacttac actgctgaat gcagagaaca acctccttga caatcaaadc cctcaaagtt	420
taggtagatt gcgtaatctt tctgttctga ttttgggtag aaaccaattt agtggacata	480
ttccttcaag cattgcaaac atttcctcgc ttaggcagct tgatttgca tgaataattt	540
cagtggagaa attccagtct cctttgacag tcaagcgcaa gtctaaatct cttcaatgtt	600
tcctacaata gcctctcang gtctgncccc cctctgcttg ccaagaaatt taactcaagc	660
tcatttgtag gaaatattca actatgtggg acagnccctc aaccccatgt tttaccaagc	720
ttcatacaag gagcatggcc ct	742

<210> 94  
<211> 741  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(741)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 94  
cttaacttga gtttcaactc cttctctggt cctttaccag ctagcctaac tcactcatTT 60  
tctctcactt ttctttctct tcaaaataac aatctttctg gtcctcttcc taactcttgg 120  
ggTgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt 180  
ttcactggTg acgttcctgc ttctttgggt agcttaagag agctcaatga gatttcctt 240  
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag 300  
acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta 360  
tcctcactta cactgctgaa tgcagagaac aacctccttg acaatcaaat ccctcaaagt 420  
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat 480  
attccttcaa gcattgcaa catttcctcg cttaggcagc ttgatttgca ctgaataatt 540  
tcagtggaga aattccagtc tcctttgaca gtcaagcgca gtctaaatct cttcaatgtt 600  
tcctacaata gcctctcang ttctgcccc ctctgcttgc caagaaattt aactcaagct 660  
catttgTggg aaatattcaa ctatgtggga caggccttca accccatgtt tttccaagct 720  
ccatcacaag gggcattgcc t 741

<210> 95  
<211> 743  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(743)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 95  
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tctctcactt ttctttctct tcaaaataac aatctttctg gtcctcttcc taactcttgg 120  
ggTgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt 180  
ttcactggTg acgttcctgc ttctttgggt agcttaagag agctcaatga gatttcctt 240  
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag 300  
acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta 360  
tcctcactta cactgctgaa tgcagagaac aacctccttg acaatcaaat ccctcaaagt 420  
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat 480

attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgca ctgaataatt 540  
tcaaggggag aaattncagt ctcccttgac agtcaagcgc aagtctaaat ctcttcaatg 600  
gttcctacaa taagcctctc anggctctgnc cccctctgct ttgncaagaa aattaactca 660  
agctcatttg ggggaaatat tcaactatgn gggacagncc ttcaacccat gttttccaag 720  
ctccatacan gagcatggcc cnt 743

<210> 96  
<211> 742  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(742)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 96  
cttaacttga gtttcaactc cttctctggt cctttaccag ctgacctaac tcactcattt 60  
tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg 120  
gggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt 180  
ttcactgggtg acgttctctg ttctttgggt agcttaagag agctcaatga gatttccctt 240  
agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag 300  
acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta 360  
tctcacttta cactgctgaa tgcagagaac aacctccttg acaatcaaat ccctcaaagt 420  
ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat 480  
attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgct actgaataat 540  
ttcaggggga gaaattccag tctcctttga cagtcagcgc aagtctaaat ctcttcaatg 600  
gttcctacaa tagcctctca nggtctgncc cccctctgct tgncaagaaa ttaactcaag 660  
ctcatttggtg ggaaatattc aactatgngg gacaggcctt caacccatgt ttttccaagc 720  
ttcatacaag gagtaatggc ct 742

<210> 97  
<211> 716  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(716)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 97  
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gagggaaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttggtg 120  
caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttgagg 180

atggaagtca agttgcagta aagagattga gggaaaagat cactaaaggt catagagaat 240  
ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgaggg 300  
cctattactt gggacccaaa ggggaaaagc ttctgggttt tgattacatg tctaaaggaa 360  
gtcttgcttc tttcctacat ggtaagtttc gtgtgctgnt ctttcattaa agtgntgggn 420  
gggctggctt ttaattataa ttggagttt taccttanta atctgtataa ttctaacgg 480  
agacaagtca aacaaaaacc ctaaggaaca acnccttanc tttaatatnc catatcaata 540  
angngaatta tttnttgggt tcatttgatg cngggggng gnacntnaaa cnttnatttg 600  
ntgggccacn anggnnnnaa aannncacaa ananttggnc cngnggnttn gnnntgcctt 660  
tantnccang anaaacatna tacanggnan ctnnctcnn naangtnntn gttngn 716

<210> 98  
<211> 616  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(616)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 98  
ggacagaaaa aggagtcctt ccagttgctg gtgggtgatgt tgaagcaggt ggggaggctg 60  
gagggaaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttggtgtg 120  
caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttggagg 180  
atggaagtca agttgcagta aagagattga gggaaaagat cactaaaggt catagagaat 240  
ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgaggg 300  
cctattactt gggacccaaa ggggaaaagc ttctgggttt tgattacatg tctaaaggaa 360  
gtcttgcttc tttcctacat ggtaagtttc gtgtgctgnt ctttcattaa gtgttggtgtg 420  
tgctgttctt taattataat ttggagnttt accttagtaa tctgtataat tctaacgga 480  
gaacagtcaa aaaaaacacc taaggaacaa caccttagct ttaatatcca tatcaataag 540  
tgaatatttt cttggtcatc ttgatgcagg ngngngaact tgaacaatca ttgattggnc 600  
caccanggat gaaaat 616

<210> 99  
<211> 532  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(532)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 99

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actggctgtg actgatctct ctggtctaat ctcttccagc tgctggagaa cttgatgaac      60
ttctggctgt gctgatggag aaggatcaac acagtgcaaa gcgagcttca acgtgttttag    120
caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgt      180
ccactcctct ttgacaactg aggcaaccca ctgaggcaaa tctagtccat tcatagacac      240
cccaggtgat ttctctgtta ggagttctaa caagataaca ccaagactgt agatatcagt      300
tttagtgttt gctttcttga gctttgagag ctcaggtgcc cggtatccca atgctccagc      360
tgtagctatc acgttggaat tagcagcagt tgacatcaac cgagaaagac caaaatctgc      420
aatttttagc tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat      480
gatgttctcc tgggaatgaa ggcggaacaa gccacgggcc aagtcttggt ct              532

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<210> 100
<211> 568
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(568)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 100

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tatgaggaca gaaanttnag tccctccagt tgctgggtgg gatgttgaag caggtgggga      60
ggctggaggg aaactagtcc attttgatgg accaatggct tttacagctg atgatctctt    120
gtgtgcaaca gctgagatca tgggaaagag cacctatgga actgtttata aggctatttt    180
ggaggatgga agtcaagttg cagtaaagag attgagggaa aagatcacta aaggtcatag     240
agaatttgaa tcagaagtca gtgttctagg aaaaattaga caccccaatg ttttggctct     300
gagggcctat tacttgggac ccaaagggga aaagcttctg gtttttgatt acatgtctaa     360
aggaagtctt gcttctttcc tacatggtaa gtttcgtgtg ctgttctttc attaagtgtt     420
gtgtgtgctg ttctttaatt ataatttga gttttacctt agtaatctgt ataattctaa     480
tcggagaaca gtcaaacaaa aaccctaagg aacacacctt actttaatat accatatcaa     540
taagngaata atttcttggt catcttga                                         568

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<210> 101
<211> 678
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(678)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 101

```

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ggtgggactg gctgtgactg atctctctgg tctaactctt tccagctgct ggagaacttg      60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt     120

```

```

gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
at ttgtccac tctcttttga caactgaggc aaccactga ggcaaatacta gtccattcat 240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc 480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cgggccaagt cttngctat 540
tttcatcctt ggtggccaat caatgaatgg ttcagtttca ccacctgcat caagatgaac 600
aagaaaataa ttcacttatt gatatggnat attaaaagct aaggggtggg ccttaggggg 660
tttggttga cggncnn 678

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<210> 102
<211> 673
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(673)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 102

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ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg 60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gttcaacgt 120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
at ttgtccac tctcttttga caactgaggc aaccactga ggcaaatacta gtccattcat 240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc 480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttngctatt 540
ttcatccttg ttggccaatc aatgaatggg tcaagttccc cacctgcatc aagatgaaca 600
agaaaataat tcacttaatg gatatggnat attaaagcta aggggtgggc cntaggggtt 660
ttgggttgnc cng 673

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```

<210> 103
<211> 665
<212> DNA
<213> soybean
<220>

```

```

<210> 104
<211> 671
<212> DNA
<213> soybean
<220>
<221> misc_feature
<222> (1)..(671)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 104
gggtgggactg gctgtgactg atctctctg tctaattctt tccagctgct ggagaacttg 60
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180
at ttgtccac tcctctttga caactgaggc aaccactga ggcaaattcta gtccattcat 240
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggt atcccaatgc 360
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggttccc 480
atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttgngctatt 540
ttcatccttg gtggccaatc aatgaatgtt tcagttccac cacctgcac aagatgaaca 600
agaaaataat tcacttattg atatggnata ttaaagctaa ggggtggtcc ntaggggggtt 660
tnqntgggcc c 671

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<210> 105  
<211> 670  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(670)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 105  
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atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120  
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180  
atgtgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat 240  
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300  
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360  
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420  
atctgcaatt ttagcatttg tantctcatc aagcaacaca ttgctggatg tgagggtccc 480  
atgtatgatg tcctcctggg aatgaaggca gaacaagcca cgggccaaagt cttgggctat 540  
tttcatcctt ggtgggccaa tcaatgaatg gttcaanttc ancacctgcn tcaagangaa 600  
caagaaaata attnctatg gnnnggatat naaactaagg gngggncccta ggggtntngn 660  
nngnccggcn 670

<210> 106  
<211> 662  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(662)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 106  
gggtgggactg gctgtgactg atctctctgg tctaatactct tccagctgct ggagaacttg 60  
atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt 120  
gttttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc 180  
atgtgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat 240  
agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat 300  
atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc 360  
tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa 420  
atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtcca 480  
tgtatgatgt tctnctggga atgaaggcag aacaagccac gggccaagtc ttngnctatt 540

tcacacctgt gggcaatcaa tgaatgttta anttcncac ctgcttnaga ggaccaagaa 600  
aanattactt attggntggg tattaagct aaggggggn cctaaggggn ttggnnggc 660  
cc 662

<210> 107  
<211> 792  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(792)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 107  
tatttacaac tagtggtatc ggagaatgaa aaattgaaga ataataagtt cagctataat 60  
aaactcgagg gaggaataac aaagaaattc atgataaata gatataactt attaaattta 120  
aggggtgtat ttgcacaccc tgaattatag agattcttat atctttgaga aaataattaa 180  
attgggaaaa aagagataat gactgattga gatttgctc agaattgttc gttttaatat 240  
tggtacgaat ctaatggntt taccctgaaa gatgctcaca agtattgagg gactaataaa 300  
ttgnttataa actactacta aatgagatga gactttaagg ngtactgaag caatatcatt 360  
taaaaaatga ctactcgcat ttgngttgag aaaatttatt ttcattgaaag naaattttnt 420  
cctttttang ataaagccat tttncttaac cnnangggga nataaaatgg cccccnttca 480  
taaaaaacct accantata taaatggatn tataccaacc ttcctangca ccatgccatt 540  
gggatnggng gaattaaatt naaaangntt gcnttggaat gggtaaaaaa ttccaaaact 600  
tnaaccnccn ccacaatttt agtggccacn gnaatattnn ttanccgntg gncntttttc 660  
caggaaaacg acccgtaacc aaanggggnn aaaagggaaa gggagatgga ttgcntgnng 720  
gtntgaggct catccnatt cccaacatg ttngggncnc aaaaccgaag tnccctgga 780  
ccatggatgn cn 792

<210> 108  
<211> 573  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(573)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 108  
gggactggct gtgactgatc tctctggtct aatctcttcc agctgctgga gaacttgatg 60  
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaactggtt 120  
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180  
tgtccactcc tctttgacaa ctgaggcaac cactgaggc aaatctagtc cattcataga 240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac ttagatatac 300  
agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc caatgctcca 360  
gctgtagcta tcacgttgga attagcagca gttgacatca acccgagaaa gacccaaatt 420  
gcaatttagc anttgnattc ttatnaacaa cacaatgggt ggatgngang gtnccaagga 480  
ttgangtttt ctgggaatga aaggganaaa caagccccgg gccaaagntt ggggttattt 540  
tnaancctgg ngggncaaan aaangaaagg ttn 573

<210> 109  
<211> 673  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(673)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 109

gggactggct gtgactgatc tctctggtct aatctcttcc agctgctgga gaacttgatg 60  
aaacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120  
tagcaactcg tcgccaaactg tggatgcatc tctcatcaag tctgcatcaa aaacctcatt 180  
tgtccactcc tctttgacaa ctgaggcaac ccaactgagc aaatctagtc cattcataga 240  
caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac ttagatatac 300  
agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaatgc 360  
ttccagctgt agcttatcac cggtgggaat taagcagcaa gttggacatt caaccggag 420  
naaaagaccc aaaaattttg caaattttta agcaatttng gnanntcttn aatcaaggcc 480  
aaccaccaat tggnttggga atgggtggaag gggttcccca atggtaattg gaagggtttc 540  
ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg 600  
nttttggggg ccttattttt tncnaatncc ctttggnggg ggncccaa at tcnaaantgg 660  
aaattggntt tnn 673

<210> 110  
<211> 564  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(564)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 110

actggctgtg actgatctct ctggtcta at ctctccagc tgctggagaa cttgatgaac 60  
ttctggctgt gctgatggag aaggatcaac acagtgc aaa gcgagcttca acgtgtttag 120

caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgt 180  
ccactcctct ttgacaactg aggcaacca ctgaggcaaa tctagtccat tcatagacac 240  
cccagggtgat ttctctgtta ggagttctaa caagataaca ccaagactgt agatatcagt 300  
tttagtggtt gctttcttga gctttgagag ctgagggtgcc cggatatcca atgctccagc 360  
tgtagctatc acgttggaat tagcagcagt tgacatcaac ccgagaaaga ccaaaatctg 420  
caatttttagc atttgattc tcatcaagca acacattgct ggatgtgagg ttcccatgta 480  
tgatgttctc ctgggaatga aggcagaaca agccacggcc aagcttggct atttcacct 540  
tgtggccaat caatgaatgg tcat 564

<210> 111  
<211> 456  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(456)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 111  
actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcgggtggg 60  
gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc 120  
ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt 180  
ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggctcat 240  
agagaatttg aatcanaagt cagtgttcta ggaaaaatta nacaccccaa tgttttggtt 300  
ntgaggccta ttacttggga cccaaagggg aaaagcttnt ggtttttgat tcatgtntaa 360  
aggaagtctt gcttntttcc tacatggnaa gtttcggggc tgtctttnat taanggtngg 420  
gngngctggn tttaattata attngnggtt tacctt 456

<210> 112  
<211> 592  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(592)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 112  
actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcagggtggg 60  
gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc 120  
ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt 180  
ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggctcat 240  
agagaatttg aatcagaagt cagtgttcta ggaaaaatta gacaccccaa tgttttggtt 300

ctgagggcct attacttggg acccaaaggg gaaaagcttc tggtttttga ttacatgtct 360  
aaaggaagtc ttgcttcttt cctacatggg aagtttcgtg tgctgttctt tcattaagtg 420  
ttgggtgtgc tgggtctttaa ttataatttg gagtttacct tannaatctg gataattcta 480  
atcggagaac agncaaacia aanccctaag gaacaaccct tanctttaat atccatatca 540  
ataagngaan tatttcttgg tcatcttgat gcaggggggg gnactgaaca tt 592

<210> 113  
<211> 460  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(460)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 113  
gggactggct gtgactgatc tctctgggtct aatctcttcc agctgctgga gaacttgatg 60  
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120  
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180  
tgtccactcc tctttgacaa ctgagggaac cactgaggc aaatctagtc cattcataga 240  
caccacaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata 300  
agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc ccaatgcttc 360  
agctgtagct atcacgttgg aattagcagc agttgacatc aaccgagaaa gacaaaaatc 420  
tgcaatttta gcatttgnat tctcattaaa caacacaatg 460

<210> 114  
<211> 566  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(566)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 114  
gggactggct gtgactgatc tctctgggtct aatctcttcc agctgctgga gaacttgatg 60  
aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt 120  
tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt 180  
tgtccactcc tctttgacaa ctgagggaac cactgaggc aaatctagtc cattcataga 240  
cnccccaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata 300  
agtttttagtg tttgctttct tgagctttga gagttaaggg ncccggantc ccannntcn 360  
agttgnagtt atancgttgg aattagcagn agttgcntca accgaaaaag accaaaaatc 420

gaatttttagc atttgttttt catcaagcaa cacattgntg gatgngaggt cccatgtatg 480  
atgttctcct gggaatgaag gcaaacaagc ccgggccaaag gcttgggcta ttttaatcct 540  
tggtggccaa acaatgaaag gttnat 566

<210> 115  
<211> 16  
<212> DNA  
<213> soybean  
<400> 115  
gactgcgtac caattc 16

<210> 116  
<211> 16  
<212> DNA  
<213> soybean  
<400> 116  
gatgagtcct gagtaa 16

<210> 117  
<211> 22  
<212> DNA  
<213> soybean  
<400> 117  
gggtttcaga taaccgtggt cg 22

<210> 118  
<211> 25  
<212> DNA  
<213> soybean  
<400> 118  
ttgcagatat tttagttgat tggcc 25

<210> 119  
<211> 24  
<212> DNA  
<213> soybean  
<400> 119  
agttgattgg ctcaaaccat ggcc 24

<210> 120  
<211> 20  
<212> DNA  
<213> soybean  
<400> 120  
ttgcgtgtga tcggtattac 20

<210> 121  
<211> 20  
<212> DNA  
<213> soybean  
<400> 121  
tacctgagtt ctctcaagtc 20

<210> 122  
<211> 252  
<212> DNA  
<213> soybean  
<220>  
<221> misc\_feature  
<222> (1)..(252)  
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)  
<400> 122  
gatttagact gcgctgactn tcaaaggaga ctggaatttc tccactgaaa ttattcagtg 60  
acaaatcaag ctgcctaagc gaggaaatgt ttgcaatgct tgaaggaata tgtccactaa 120  
attggtttct actcaaaatc agaacagaaa gattacgcaa tctacctaaa ctttgagggga 180  
tttgattgtc aaggagggtg ttctctgcat tcagcagtgt aagtgaggat aaattagaga 240  
gggtagcagg ca 252